



Oxford Cambridge and RSA

**Level 3 Certificate**  
**Quantitative Problem Solving (MEI)**  
**H867/01** Introduction to Quantitative Reasoning

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**Time allowed: 2 hours**



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## The UK tax system

A **flat rate** of tax is used in some countries. This means that everybody pays a fixed percentage of their entire income.

The UK tax system is **redistributive**. This means that people with higher incomes pay a larger percentage of their income in tax.

During the tax year 2015/16 in the UK you pay two different types of taxes when you earn money.

- income tax
- national insurance

For income tax the first £10 600 of a worker's annual salary is called the **tax free allowance**. No income tax is paid on this. Income between £10 600 and £42 385 is taxed at the **basic rate** of 20%. Income between £42 385 and £100 000 is taxed at the **higher rate** of 40%. Incomes above £100 000 have slightly more complicated rules.

**National insurance** is paid by most people at a rate of 12% on income between £8065 and £42 385. Any additional income above £42 385 is taxed at a rate of 2%. No national insurance is paid on income below £8065.

All of these taxes may be reduced by taking part in a **salary sacrifice** scheme. This is where some money is paid before tax into a recognised scheme, such as a pension. This lowers the amount of tax paid.

The income before tax is called the **gross income**. The income after tax and national insurance have been paid is called the **net income**.

For example, Joanna has a gross income of £50 000. She would pay:

- basic rate income tax on £31 785, which is £6357
- higher rate income tax on the next £7615, which is £3046
- basic rate national insurance on £34 320, which is £4118.40
- higher rate national insurance on £7615, which is £152.30.

Her total tax bill is £13 673.70 and her net pay is therefore £36 326.30 per year or around £3027 per month.

If Joanna made a salary sacrifice of £5000 per year into a pension, her new higher rate of income tax and national insurance would only be on £2615. Her new total tax bill is £11 573.70, so her new net monthly pay would be about £2786.



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